GR- B Membranefilterelement

Function

The hydrophilic polyethersulfone membrane (PES membrane) with asymmetrical pore size distribution enables absolute retention rales of pailicles and microorganisms. High flow tale, excellent dirt holding capacity and good thermal and mechanical resistance of the COLF (Contec Liquid Filters) element ensure a wide range of applications.

Basic specification

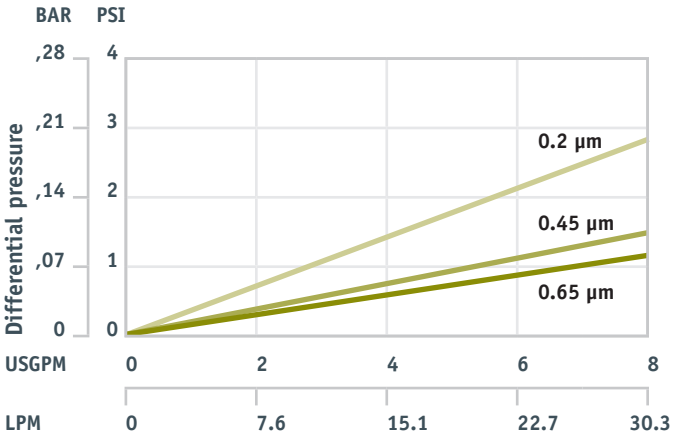
- Production in clean rooms (in accordance with ISO Class 7
- Pre-rinsed with DI water
- All materials used are FDA-listed and therefore approved for contact with food
- Biological safety according to USP Class VI
- Can be steamed/sanitised several times
- Complies with EU Regulations 1935/2004 and 10/2011 on plastics intended to come into contact with foodstuffs
- Each filter element is labelled with a serial number and filter fineness and is therefore always clearly identifiable and traceable

Areas of application

- Water treatment (ultrapure water, demineralised water)
- Pharmaceutical products
- Food
- Drinks (wine, beer, spirits, sparkling wine, mineral water, etc.)
- Cosmetics
- Ultrapure chemicals
- Photoresists
- LVPs

Diagram

Flow rate of a 10" filter cartridge as a function of the differential pressure.



Flow rate with water (per 10" candle)

Technical Data

Filter medium:	Asymmetrical polyethersulfone membrane
Support core, end caps Cage:	Polypropylene
Seals / O-rings:	Perbunan, EPDM, silicone, Viton, Viton (Teflon-coated)
Filter fineness:	0.2 µm, 0.45 µm and 0.65 µm
Inner diameter:	25.4 mm
Outer diameter:	69 mm
Filter area:	0.7 m^2 (per 10" filter element)
Operating temperature:	Max. 80 °C (at 1.38 bar differential pressure)
Differential pressure:	forward: Max. 4.14 bar @ 21 °C Max. 2.8 bar @ 71 °C backwards: Max. 2.8 bar @ 21 °C
Filter change:	late. at 2.4 bar differential pressure

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Sanitisation

The filter elements can be sanitised for up to 30 minutes using hot Di water at 85°C.

Chemical cleaning/sterilisation

Compatible with common dry cleaning and sterilisation agents in the pH range of 1-14.

Steam sterilisation

The filter element withstands at least 5 one-hour steaming cycles at 135°C.

Bacteria retention rate

0.2 µm LRV for B. diminuta ≥ 7.8
0.45 µm LRV for S. marcescens ≥ 8.5
0.65 µm LRV for S. cerevisiae ≥ 11

(Unit of measurement LRV = Logarithmic Retention Value)

Integrity test data

Filter fineness	Bubble Point	Diffusive Air Flow
0.2 µm	≥ 2.8 bar	≤ 35 cm^3 /min @ 2.0 bar
0.45 µm	≥ 1.7 bar	≤ 35 cm^3 /min @ 1.4 bar
0.65 µm	≥ 1.2 bar	≤ 35 cm^3 /min @ 1.0 bar

Order example: GR 25-B-320-002-1

GR 25-B-	☐	☐	–	☐	–	☐
	Adapter	**Length**		**Fineness**		**Gasket**
	1 = DOE	93 = 9 3/4"		002 = 0,2 µm		0 = Buna
	2 = 226 / Flat	10 = 10"		004 = 0,45 µm		1 = EPDM
	3 = 222 / Flat	20 = 20"		006 = 0,65 µm		2 = Silicone
	6 = Ametek adapter (O-Ring inside)	30 = 30"				4 = Viton
	7 = 226 / FIN	40 = 40"				5 = Viton, Teflon-coated
	8 = 222 / FIN					

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